

REMARKS

Claims 1-14 are all the claims now pending in the application. Claim 14 has been added as a new claim.

I. Formal Matters

Applicant has amended claim 6 to depend solely from claim 2 and created a new claim 14 which is identical to claim 6 except that claim 14 depends from claim 4.

II. Claim Rejections under 35 U.S.C. § 102

Claims 1-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bauer et al. (U.S. Patent No. 4,833,565) or Bauer (U.S. Patent No. 4,720,763) or Saletta et al. (U.S. Patent No. 4,720,761) or Marumatsu et al. (U.S. Patent No. 5,684,668). To be an “anticipation” rejection under 35 U.S.C. § 102, the reference must teach every element and limitation of the Applicant’s claims. Applicant submits that the cited reference each fail to teach supplying current to the electromagnet only for a predetermined amount of time.

Each of the above references teach methods of adjusting the voltage applied to the coil of a magnetic contactor in order to reduce the force of impact of the moving core against the fixed core. Specifically, by continuously varying the voltage applied to the coil, the magnetic force applied to the moving core can be adjusted, which consequently, adjusts the acceleration and velocity of the moving core. Therefore, these references teach that by controlling the voltage applied to the coil, the velocity of the moving core can be substantially reduced prior to impact

with the fixed core, thereby reducing the bounce and vibrations caused by a high velocity collision between the movable core and the fixed core.

However, the present invention differs from each of these reference in that the current applied to the electromagnet is supplied at a predetermined level only for a predetermined time and then the applied current is turned off. In other words, the present invention turns the applied current on and off intermittently, instead of continuously varying the current level as in the cited references. Conversely, the references control the velocity and acceleration of the moving core by continuously adjusting the voltage that is applied to the coil. Said differently, the references do not turn the applied current/voltage off at any point while the moving core is in motion. However, in the claimed invention, the attraction force control means applies the predetermined current to the electromagnet only during the predetermined time.

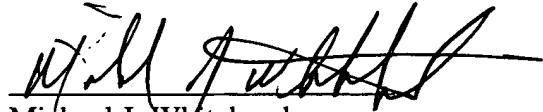
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
Appln. No.: 10/030,536

Attorney Docket No.: Q67759

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Michael J. Whitehead
Registration No. 48,071

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
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